

STANFORD UNIVERSITY MEDICAL CENTER

DEPARTMENT OF GENETICS

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As can be documented (with more detailed figures to be furnished later) the SUMEX-AIM system has become heavily loaded, to the point of significant discomfort for many external users. This is particularly discouraging at the point where interesting programs (like CONGEN) have been developed to a level of real utility, and which then require field-testing to demonstrate their full value, and to polish them from the ultimate users' standpoint.

Within the SUMEX group at Stanford, we are undertaking serious studies on various technical alternatives for the long-range solutions to these problems. These are being prepared in time for the submission of the SUMEX-AIM project renewal application intended for June, 1977.

Dr. Amarel has led one of the largest, most important and most creative of the SUMEX-user groups, and its requirements constitute a significant part of the load. The strengthening of the RUTGERS-10 facility, particularly in a coordinated managerial framework, would plainly be of great use to that cluster of AIM-user projects, and could also provide immediate computer-power for a significant group of users thus lightening the overall burden. The adoption of compatible operating systems -- which is now economical in the light of DEC support of TOPS-20 -- would facilitate that sharing of resources, with particular merit for east-coast users.

Although computer-network communications remain a viable option for transcontinental resource sharing, restrictions on the use of ARPANET, and idiosyncrasies of the available commercial systems, are such that many users would be more comfortable working within feasible direct-dial-up range of the serving machine. This is particularly important in clinical applications; less so in the chemical ones which are more computer-intensive.

We therefore concur that Dr. Amarel's application

could serve as a valuable augmentation of SUMEX-AIM
NATIONALLY-shared resources, as well as of its primary
regional purposes. We are certainly willing to cooperate to
the utmost in assuring a common management framework for
the allocation of the resource, and in the endeavour to
sustain the highest practicable technical compatibility (or
complementarity where this is indicated.)

Joshua Lederberg



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SUMEX-AIM Project